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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JOHN W. CHRISMAN, III

Appeal 2009-001028
Application 09/832,141
Technology Center 3700

Decided: ¹June 16, 2009

Before DEMETRA J. MILLS, LORA M. GREEN, and
JEFFREY N. FREDMAN, *Administrative Patent Judges*.

MILLS, *Administrative Patent Judge*.

DECISION ON APPEAL

¹ The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the decided date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

STATEMENT OF CASE

This is an appeal under 35 U.S.C. § 134. The Examiner has rejected the claims for obviousness. We have jurisdiction under 35 U.S.C. § 6(b).

The following claims are representative.

1. A bowling ball, comprising:
a mass comprising a two-part resin; and
a fragrance at least partially dissolved in at least a portion of said two-part resin of said mass.
9. The bowling ball of claim 1, further comprising a pigment, wherein a scent of said fragrance correlates with a color of a pigment of or in said two-part resin.
10. A method for manufacturing a bowling ball, comprising:
providing a liquid material;
blending at least one fragrance directly into said liquid material;
introducing said liquid material and said at least one fragrance into a cavity of a mold; and
curing said material with said at least one fragrance therein.
20. A method for forming an article of manufacture, comprising:
providing a polyol;
blending at least a fragrance directly into said polyol;
substantially removing gas or gas bubbles from a mixture including said polyol and said fragrance;
introducing said mixture and a polymerization catalyst therefor into a cavity of a mold; and
permitting a blend including said polyol and said polymerization catalyst therefor to at least partially polymerize to form the article of manufacture.
21. The method of claim 20, wherein said blending at least said fragrance comprises dissolving at least one fragrance in said polyol.

23. The method of claim 20, wherein said introducing includes blending said polyol and said polymerization catalyst therefor.
24. The method of claim 20, wherein said introducing said polymerization catalyst includes introducing isocyanate into said cavity with said polyol.
31. The article of claim 27, wherein said two-part resin comprises a two-part polyurethane.
32. The article of claim 27, further comprising a pigment.
33. The article of claim 32, wherein a scent of said fragrance correlates with a color of said pigment.

Cited References

Coffey	US 4,293,602	Oct. 6, 1981
Shibanai	US 4,722,815	Feb. 2, 1988
Anderson	US 4,762,493	Aug. 9, 1988

Oleesky et al, *Handbook of Reinforced Plastics of the Society of the Plastics Industry*, "Epoxy Resins", pgs. 5 and 71, col. 1, ln. 20, New York, 1993.

Grounds of Rejection

1. Claims 1-3, 5, 7, 8, 10-27, 29 and 31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Shibanai in view of Coffey.
2. Claims 9, 32 and 33 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Shibanai in view of Anderson.

Rejection 1. Claims 1-3, 5, 7, 8, 10-27, 29 and 31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Shibanai in view of Coffey.

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Claims 20-27, 29 and 31-33

We separately address claims 20-27, 29 and 31-33 and claims 1-19. Unlike claims 1-19, claims 20-27, 29, and 31-33 do not include any limitation to a bowling ball. Claim 20 is directed to a method for forming an article of manufacture, comprising: providing a polyol; blending at least a fragrance directly into said polyol; substantially removing gas or gas bubbles from a mixture including said polyol and said fragrance; introducing said mixture and a polymerization catalyst therefor into a cavity of a mold; and permitting a blend including said polyol and said polymerization catalyst therefor to at least partially polymerize to form the article of manufacture.

ISSUE

The Examiner concludes that claims 1-3, 5, 7, 8, 10-27, 29, and 31 are rendered obvious by the combination of Shibani and Coeffey, in view of the knowledge in the art. In response to Appellant's evidence and arguments of commercial success, the Examiner concludes that there is no nexus between the nature of the product and the claimed product's commercial success and that sales data alone is not indicative of commercial success.

Appellant contends that the Examiner has not presented a *prima facie* case of obviousness (App. Br. 9), and that the evidence of commercial success in the record overcomes any *prima facie* case of obviousness. (App. Br. 11-12, 14.)

The issues are: Did the Examiner fail to present a *prima facie* case of obviousness and err in the determination that there was no nexus between commercial sales and the claimed product features based on the evidence of record?

FINDINGS OF FACT

1. Perfumed additives and perfumed polymers intended for the purpose of making plastic articles with a fragrance are also well known. Shibanai teaches compounds to be included in synthetic resin products in order to enhance their smell. (Ans. 3.)
2. Shibanai teaches the use of epoxy (col. 7, ln. 56) which is known in the art to be available as a one-part or two-part resin. (Ans. 3.)
3. Where the claims call for a two-part resin and the fragrance being dissolved therein, Shibanai directly teaches (col. 7, ln. 56) that smell can be added to “epoxy resin coatings.” (Ans. 3.)
4. Epoxy resin is a known “two part” resin. See evidence in the copy of Handbook of Reinforced Plastics, “Epoxy Resins”, pg. 71, col. 1, ln. 20, which shows that “cure may be established using materials classed as hardeners or curing agents,” which include catalysts or crosslinking agents which copolymerize molecules. (Ans. 3.)
5. Shibanai also teaches that “it is also possible to mix perfume ... with a synthetic resin compound followed by molding” (col. 1, ln. 26) but that this “direct addition of perfume ... to synthetic resin compound is not as effective as it seems” (col. 1, 35). (Ans. 3-4.)
6. Shibanai teaches an improved more effective method of adding fragrance to a product that includes forming an inclusion compound consisting of perfume included in cyclodextrin. (Ans. 4.)
7. While Shibanai does not detail the old and known methods of “mixing perfume” and “direct addition of perfume” that is at least partially dissolved within the resin, such are considered old when one further considers Coffey as an example. (Ans. 4.)

8. Coffey teaches that it is an old expedient and would have been obvious to mix fragrances to two part resins in the forming of a fragrances polymer product. (Ans. 4.)
9. Edwards and Wilbert, are further examples of direct mixing of fragrances with a polyurethane prior to molding. The Examiner finds that the art is replete with the successful addition of fragrance to two part polymer products. (Ans. 4.) The motivation is simply to “impart to other polymeric products pleasant odors” (Wilbert, col. 1, ln. 57). (Ans. 4.)
10. The Examiner finds that the ordinary artisan would have known that once the catalyst is added to polyol, there a “working time” for the resin is set when working with a two-part resin known in the polymer art. The Examiner finds that mixing the fragrance into the polyol, the main fundamental ingredient thereof, prior to the catalyst, does nothing more than what would be obvious to the skilled artisan. (Ans. 8.)
11. The Examiner finds that the removal of gas “trapped” in a polymer mixture is old and inherent in the art of plastics. Failure to do so results in an inferior final product made by the visibility of “bubbles” that are trapped after the product has fully cured. (Ans. 8.)
12. The Examiner finds that Appellant is not the inventor of removing trapped air or gas known throughout the plastics industry. See U.S. 6,525,125, col. 10, ln. 55 which discloses a resin for production of bowling balls and removing of gas bubbles under a vacuum at col. 11, ln 63. On pg. 8, [0032] of his specification, appellant admits to the use of a vacuum, as well as “any known techniques.” (Ans. 8.)
13. With respect to claim 21, Shibanai discloses mixing fragrance inclusion compounds (col. 2, ln. 45) “with a synthetic resin coating” (col. 3, ln. 57) for “direct addition of perfume(s) ... to a synthetic resin compound” (col 1, ln.

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35). Shibanai discloses "epoxy resin" (col. 7, ln. 56) which is a broad category of known polyols. (Ans. 9.)

14. The Examiner finds that polyol in the method of manufacturing of a bowling ball is old. This is admitted by appellant on his specification, paragraph [0004]. (Ans. 9.)

15. Webster's New World Dictionary defines "dissolve" as "to merge with a liquid." (Ans. 9.)

16. Shibanai teaches a fragrance that is to be "merged" with a liquid polymer. Shibanai, Examples 1-3, Cols. 8 and 9. The Examiner finds that a catalyst is well known as being used with polyols to cause polymerization. (Ans. 9.)

17. The Examiner finds that the use of isocyanates as called for by claim 24 is old. See pg. 5 of the *Handbook of Reinforced Plastics*, appended to the Answer. They are mostly known for having a "foaming" affect on plastic compositions. (Ans. 9.)

18. The Examiner finds motivation to combine the teachings of Shibanai and Coffey with bowling balls two-part polyurethane bowling balls, admittedly old and well known, in order to give them a better smell. Fragrance inclusion products and methods that have been applied in the art to be known to work on other polymer resin products would be expected to work on a bowling ball made of similar polymers. The Examiner finds that the level of ordinary skill necessary to recognize the results is low. The Examiner concludes that based on the record, there is no new or different function of the bowling ball of the instant invention and that the results of adding fragrance to a polymer in a bowling ball give the predictable results of having the bowling ball smell according to the fragrance added. (Ans. 9.)

19. The Examiner finds that Appellant has done nothing more than apply known techniques of including a fragrance into a plastic resin product to yield a predictable outcome with only common tools of the trade. The rejection suggests modifying known two-part polyurethane bowling balls, admitted old by appellant at the bottom of pg. 2 of his specification, using the products and techniques known in the art as suggested by Shinbanai and Coffey. The Examiner concludes that one would recognize that known techniques for imparting a fragrance in plastic products would yield the same results in other products made of similar polymer materials. (Ans. 10.)

Commercial Success Evidence

20. "Prior to selling scented bowling balls, Storm sold fewer than 150,000 balls each year. In 1998, Storm sold 126,321 bowling balls, representing gross revenues to Storm of \$8,885,669.31. In 1999, Storm sold 145,320 bowling balls, representing gross revenues to Storm of \$10,830,114.31." (Declaration of John Chrisman, III, June 28, 2005, ¶6.)

21. "Storm began marketing scented bowling balls in 2000. The first sales occurred on April 12, 2000." (Declaration of John Chrisman, III, June 28, 2005, ¶7.)

22. "Although scented bowling balls were only sold for seven and a half months of that year, 59% of the balls we sold in the year 2000 were scented (93,320 scented bowling balls (gross revenues of \$6,510,180.90) of a total of 158,010 total bowling balls (gross revenues of \$11,268,527.16) sold that year). The scented bowling balls quickly began outselling our unscented bowling balls." (Declaration of John Chrisman, III, June 28, 2005, ¶8.)

23. After introducing the scented bowling ball, Storm's sales of bowling balls jumped significantly. "In 2001, we sold 213,464 bowling balls in all

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(gross revenues of \$15,122,945.73), 153,504 (gross revenues of \$11,931,312.18) of which were scented, representing 72% of all of the bowling balls we sold that year--an increase of 64% in scented bowling ball sales and 35% of our total bowling ball sales over the previous year. While our total sales increased significantly, the marketing expenditures did not.” (Declaration of John Chrisman, III, June 28, 2005, ¶9.)

24. “Since 2001, we have maintained this high level of sales. Our sales of scented bowling balls, at a rate of around 150,000 or more each year, has continued to outpace our pre-2000 total bowling ball sales, which topped out at 145,320. In addition, unscented bowling balls are selling at a rate of about 85,000 or more each year. In total, we have sold about 240,000 or more bowling balls each year for the past three years.” (Declaration of John Chrisman, III, June 28, 2005, ¶10.)

25. “As a result of the commercial success of Storm's scented bowling balls since their introduction, our share of the market in which we participate has increased to about 28%. Storm has become the number two manufacturer of bowling balls in the world.” (Declaration of John Chrisman, III, June 28, 2005, ¶11.)

26. “Storm has sold more than 750,000 scented bowling balls, representing gross receipts to Storm of over \$55,000,000.00.” (Declaration of John Chrisman, III, June 28, 2005, ¶12.)

27. “The commercial success that Storm has experienced by selling scented bowling balls, as well as the unexpected results of scented bowling balls, have resulted in a lot of positive press for the company, including news stories on MSNBC.com (which can be viewed at <http://msnvideo.msn.com/video/default.aspx?replace=ac69fbce-795b-496e-8069-afba1464c46c%2Cd2bcab77-7573-4664-b01b-23>

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f-8db4-8a72ea88476d%2C2e 1 ab49f-83 c5- 4bc3-b30a-

8978d997flc6&autoStart=0), NBC Television (on “Today Show”), Fox News Channel, ABC Television (on “Good Morning America”), on NBC Television’s “Saturday Night Live,” and on a variety of local television stations (including KING5 television in Seattle, Washington, and KUTV and KSL-TV in Salt Lake City, Utah. The Fox News Channel, KUTV, “Saturday Night Live,” and “Good Morning America” stories appear on the DVD enclosed herewith as Exhibit 1. The “Today Show” and KSL-TV news stories appear on the DVD enclosed herewith as Exhibit 2.” (Declaration of John Chrisman, III, June 28, 2005, ¶13.)

28. “In addition, several newspaper and magazine articles demonstrate the commercial success and unexpected results of Storm’s scented bowling balls. For example, Storm’s scented bowling balls have been the subject of articles in the Wall Street Journal (Exhibit 3), USA Today (Exhibit 4), and articles in a number of other national, regional, and local newspapers and magazines (Exhibit 5 - Exhibit 10), and received a mention in Sports Illustrated (Exhibit 11).” (Declaration of John Chrisman, III, June 28, 2005, ¶14.)

10. “As many of these articles indicate, Storm’s scented bowling balls have become so popular that fifteen (15) of the top pro bowlers, including Professional Bowlers’ Association (PBA) Hall of Fame member Pete Weber, use them. In fact, nine (9) of the twenty (20) tournaments in the PBA’s 2003-2004 season were won with Storm’s scented bowling balls.”

(Declaration of John Chrisman, III, June 28, 2005, ¶15.)

29. "To nearly everyone's surprise-including plenty of bowlers who laughed when they got their first whiffs-Storm's scented ball are quite popular, according to pro-shop owners and others in the business, and they have turned the little company into one of the hottest players in an otherwise down-at-the-heels industry." (New York Times, March 14, 2005.)

30. "Until now, Storm never argued that scents affected performance. But Steve Kloempken, the company's technical director, says computerized tests indicate that the aromatic chemicals give Storm balls a bit of extra hook. Storm's odors might not be strong enough to knock down pins, but some bowlers say the fragrances have occasionally distracted opponents. Others say the smells relax them, and they've gotten in the habit of inhaling before each throw. Tony Pena, manager of Action Pro Shop says he especially likes the way the balls smell in his car. 'It's like an air freshener.'" (New York Times, March 14, 2005.)

31. "You know when a professional bowler is looking for a new ball, they look for things like the radius of gyration and even the flair potential. And the real professionals look for the smell too." (NBC News, King5.com, June 21, 2004.)

32. "At any given tournament, Solan has an 'arsenal' of eight balls, most of which are scented. He chooses the ball to use based on specific conditions of the lane, hook ratings and surface preparations. He has nearly 27 years of bowling experience and has just recently moved from amateur to professional status at the regional level." (Desert News, July 19, 2004.)

33. "But what does the bowler get out of a scented ball? Cerar said he's heard two answers. One, it makes a nasty bowling bag smell better. And two, it has a calming effect on the bowler who steps onto the lane and holds the ball close to his nose before letting it fly. It puts him in the zone. There's

no I in team, but there is an *om* in aroma.” (Journal Sentinel, February 1, 2005.)

34. “Storm Bowling, the Brigham City, Utah, company that markets fragranced bowling balls, says 15 top pro bowlers use its high-priced scented balls (Pete Weber is one of them), and were rolled by the winners in nine of the last 20 Pro Bowlers Association events.” (SouthcoastToday.com, June 14, 2004.)

35. “Pro bowler Ryan Shafer says he’s been successful with black cherry and cinnamon scented balls, but one with a black licorice smell had an edge once because his opponent hated black licorice.” (SouthcoastToday.com, June 14, 2004.)

36. “The positive press received by Storm in connection with its scented bowling ball, including that which is referenced in my June 24, 2005 declaration, has not been solicited by Storm. Storm does not have a public relations expert or firm, and did not retain one to generate any of the press which has been received by Storm or its scented bowling ball. Neither Storm, nor any representative of Storm, solicited the newspaper, television, and other media reports and accounts, including those referenced in my prior declaration.” (Declaration of John Chrisman, III, March 31, 2006, ¶5.)

37. “The dramatic success of the scented bowling ball, as also described in my June 24, 2005 declaration, was not the result of an increase in marketing expenditures. While Storm has gradually increased its overall expenditures in marketing since 2001, the increases have followed the surprising success of the scented bowling ball; they did not precede that success. It is clear from our sales and marketing expenditure history that Storm has only been able to increase its expenditures because it first had increased sales revenues from the scented bowling ball. This is also evidenced by the fact

that the percentage of all balls sold by Storm which were scented balls increased significantly without a corresponding emphasis in our marketing of the scented balls.” (Declaration of John Chrisman, III, March 31, 2006, ¶6.)

38. “The unexpected and surprising success of the scented balls can only be attributed to the unexpected and surprising market acceptance of the scented balls.” (Declaration of John Chrisman, III, March 31, 2006, ¶6.)

39. “Bowling ball performance is critical to most purchasers of bowling balls. For example, most bowlers are concerned with the ‘hook’ of a ball across the hardwood bowling lane. This comes from the spin of the ball, but is impacted by the friction.” (Declaration of John Chrisman, III, March 31, 2006, ¶7.)

40. “Accordingly, bowling ball manufacturers are reluctant to add materials to a manufacturing process which may impact the performance or hook of the ball. Storm was surprised to find that adding a fragrance to its bowling balls did not adversely affect the balls’ performance. There is even some evidence that it enhances the performance by increasing the move on the hook of the ball at the back end of the lane.” (Declaration of John Chrisman, III, March 31, 2006, ¶7.)

41. “The unexpected success of the scented bowling balls, and at least the absence of an adverse effect on performance (if not a possible enhancement of the balls’ performance) is evidenced by the surprising acceptance of the balls by professional bowlers. As also described in my June 24, 2005 declaration, at least fifteen (15) of the top pro bowlers, including Professional Bowlers’ Association (PBA) Hall of Fame member Pete Weber, use Storm’s scented bowling balls. The professionals are so concerned with performance that they would not use a ball that impacted their success

negatively in any way.” (Declaration of John Chrisman, III, March 31, 2006, ¶8.)

PRINCIPLES OF LAW

An invention that would have been obvious to a person of ordinary skill at the time of the invention is not patentable. As reiterated by the Supreme Court in *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007), the framework for the objective analysis for determining obviousness under 35 U.S.C. § 103 is stated in *Graham v. John Deere Co.* Obviousness is a question of law based on underlying factual inquiries. The factual inquiries enunciated by the Court are as follows:

- (1) Determining the scope and content of the prior art;
- (2) Ascertaining the differences between the claimed invention and the prior art; and
- (3) Resolving the level of ordinary skill in the pertinent art.

In addition, objective evidence, sometimes referred to as “secondary considerations” (e.g., commercial success, long-felt but unsolved needs, failure of others, unexpected results) relevant to the issue of obviousness presented by the Applicant must be evaluated.

The question of obviousness must be resolved on the basis of these factual determinations. While each case is different and must be decided on its own facts, the *Graham* factors, including secondary considerations when present, are the controlling inquiries in any obviousness analysis. As stated by the Supreme Court in *KSR*, “While the sequence of these questions might be reordered in any particular case, the [Graham] factors continue to define the inquiry that controls.” See *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 407 (2007). The obviousness analysis “need not seek out precise teachings

directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR Int’l v. Teleflex Inc.*, 550 U.S. 398, 418, 127 S. Ct. 1727, 1741 (2007). This “person of ordinary skill is also a person of ordinary creativity, not an automaton.” *Id.* at 1742.

With respect to commercial success as a secondary indicator of nonobviousness, “evidence related solely to the number of units sold provides a very weak showing of commercial success, if any.” *In re Huang*, 100 F.3d 135, 140 (Fed. Cir. 1996). Moreover, “a nexus is required between the sales and the merits of the claimed invention.” *Huang* at 140. That is, for commercial success of a product embodying a claimed invention to have true relevance to the issue of nonobviousness, that success must be shown to have in some way been due to the nature of the claimed invention, as opposed to other economic and commercial factors unrelated to the technical quality of the patented subject matter. *Cable Electric Products, Inc. v. Genmark, Inc.*, 770 F.2d 1015, 1027 (Fed. Cir. 1985).

Moreover, “[w]hen prima facie obviousness is established and evidence is submitted in rebuttal, the decision-maker must start over.” *In re Rinehart*, 531 F.2d 1048, 1052 (CCPA 1976); *In re Hedges*, 783 F.2d 1038, 1039 (Fed. Cir. 1986) (“If a prima facie case is made in the first instance, and if the applicant comes forward with reasonable rebuttal, whether buttressed by experiment, prior art references, or argument, the entire merits of the matter are to be reweighed”).

ANALYSIS

Claims 20, 21, 23, 24, and 31

Appellant contends that Shibanai and Coffey do not suggest either a bowling ball with a two-part resin or method of forming an article of manufacture that includes use of a polyol and a polymerization catalyst for the polyol (Br. 10) and that there is no motivation to combine the cited references. (Br. 11.)

We are not convinced by Appellant's argument. Shibanai discloses that epoxy is known in the art to include one and two part resins. (FF 2, 3, 4, 14.) Appellant has present no evidence showing that the use of a two part epoxy resin would not have been obvious, given the disclosure by Shibanai (FF 2, 3, 4, 14). As to the motivation to combine Shibanai and Coffey, we agree with the Examiner that addition of fragrance to polymer, in any product form is old as evidence by both Shibanai and Coffey which are analogous art and related to the claimed subject matter.

With respect to claim 20, Appellant argues that "both Shibanai and Coffey lack any teaching or suggestion of "substantially removing gas or gas bubbles from a mixture including [a] polyol and [a] fragrance." (App. Br. 10.) We are not persuaded by this argument. Appellant has admitted in the Specification at page 8, [0032] that techniques are known for removing gas bubbles from escaping a liquid, including the use of a vacuum. (FF 11, 12.) The obviousness analysis "need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *KSR Int'l v. Teleflex Inc.*, 550 U.S. 398, 418, 127 S. Ct. 1727, 1741 (2007). This "person of ordinary skill is also a person of ordinary creativity, not an automaton." *Id.* at 1742. The Specification evidences that one of ordinary skill in the art would know how to remove gas bubbles from liquid in the manufacture of polyols. (FF 12.)

Regarding claim 21, Appellant argues that Shibanai and Coffey do not teach dissolving a fragrance in a polyol. (App. Br. 10.) However, Shibanai teaches merging a fragrance in a polyol. (FF 16.)

With respect to claim 23, Appellants argue that Shibanai and Coffey do not teach blending a polymerization catalyst with a polyol. (App. Br. 10.)

Shibanai teaches a fragrance incorporated into an epoxy resin (expoxidized polyolefin). (FF3.) It is known in the art that epoxy resins may be hardened with a catalyst. (FF 4.) Therefore, we are not persuaded by Appellant's arguments.

With respect to claim 24, Appellant argues the cited references fail to teach the incorporation of an isocyanate. (App. Br. 11.) However, isocyanates are known antifoaming agents known to incorporated in plastics. FF17. “[W]hen the question is whether a patent claiming the combination of elements of prior art is obvious,” the relevant question is “whether the improvement is more than the predictable use of prior art elements according to their established functions.” *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 407 (2007). We find the incorporation of isocyanates into plastic is a predictable use of a known element according to its established function.

Previously presented arguments are argued for claim 31. (App. Br. 11. Shibanai discloses a polyurethane resin at col. 7, ll. 54-57. For the reasons herein, based on the facts in evidence, we find that the Examiner has presented a *prima facie* case of obviousness for the subject matter of claim 31, which has not been rebutted by Appellant's arguments of record.

In the present case, we do not find that Appellant's evidence of commercial success is commensurate with the scope of claim 20. “[O]bjective evidence of nonobviousness must be commensurate in scope with the claims.” *In re Lindner*, 457 F.2d 506, 508 (CCPA 1972).

Appellant's Declaration evidence does not show commercial success or unexpected results for any product made by the claimed method for forming an article of manufacture. There is no evidence of record supporting commercial success for any product, other than a bowling ball. Because claim 20 is significantly broader in scope than the evidence of commercial success presented, we do not find the evidence of commercial success proffered overcomes the *prima facie* case of obviousness made by the Examiner. The obviousness rejection of claims 20-27, 29 and 31-33 is affirmed.

Claims 1-19

We find that Appellant's evidence of commercial success provides a nexus between increased product sales and the nature of the claimed product.

The facts herein support a nexus between the fragrance in the claimed bowling ball and its desirability and associated increased sales. (FF 29, 31, 32, 33, 34, 36.) In particular, several news articles indicated that the balls were purchased by amateur and professional bowlers because of the scent. (FF 29, 31, 32, 33, 34, 36.) In addition, the evidence of record shows that increased sales were not the result of increased marketing. (FF 23-27, 37, 38.) In our view, the evidence of record shows that increased sales were significant and associated with the nature of the product, the bowling ball's scent.

Thus, when entire merits of the *prima facie* case are reweighed in view of Appellant's evidence of commercial success, we conclude that evidence of record supports Appellant's position and the obviousness rejection of claims 1-19 is reversed.

Rejection 2. Claims 9, 32 and 33 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Shibanai in view of Anderson.

ADDITIONAL FINDING OF FACT

42. Anderson teaches that it is known in the art to add a fragrance related to the color of the object. (Abstract.)
43. Anderson teaches that it is known to impregnate a wax crayon or clay with color. (Anderson, claims 1 and 6.)
44. Shibanai discloses adding a pigment, zeolite, to a synthetic resin product. (Col. 1, ll. 45.)

ANALYSIS

Appellant contends that the Examiner has not established a prima facie case of obviousness for claims 9, 32 and 33, and argues that these claims are allowable because independent claims 1 and 27 are allowable for reasons previously argued by Appellant. (App. Br. 15.)

We agree with the Examiner that applying a pigment to a polymer resin to give them color is old and well known and that the evidence of record in view of the skill of one of ordinary skill in the art establishes a prima facie case of obviousness. For the reasons discussed herein, we find the evidence of commercial success convincing as to claim 9. We do not find the evidence of commercial success to be convincing for claims 32 and 33 for the reasons already discussed.

The rejection of claim 9 is reversed. The rejection of claims 32 and 33 is affirmed.

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SUMMARY

The obviousness rejections of claims 1-19 is reversed. The obviousness rejections of claims 20-27, 29 and 31-33 is affirmed.

AFFIRMED-IN-PART

Ssc:

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